

## Evaluating the Activity of University Business Incubators within Resolution 1275

Presenting the Status of the Business Incubators of Bordj Bou Arréridj University during the Period 2022-2024

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### Abstract:

This study aimed to elucidate the importance of business incubators in the university environment, and to assess their contribution as a mechanism for fostering entrepreneurial thinking among university students, focusing on the reality of these incubators at the University of Bordj Bou Arreridj and evaluating the activities it carried out during the period 2022-2024.

The study concluded that the business incubators at Bordj Bou Arreridj have received more than 280 student projects were registered, spanning startup projects/patents during the academic year 2022-2024. It was observed that the majority of these projects were specialized, with a significant portion originating from the Faculty of Science and Technology, focusing on innovation and modern technology. These initiatives contribute to the development of the national economy and the creation of wealth. Bordj Bou Arreridj University has witnessed a qualitative leap in the field of innovation and graduation projects linked to startup enterprises, with over 88 projects in startup enterprises during the academic year 2023-2024.

**Keywords:** University business incubators, startups, patents, Bordj Bou Arreridj University.

**JEL Classification Codes:** I23, O34, M13.

### 1. Introduction:

University business incubators represent a new model of supportive structures for students with entrepreneurial projects. They aim to encourage and steer students towards entrepreneurial endeavors, in addition to focusing on the university environment as one of the most effective mechanisms for fostering entrepreneurial thinking among students.

It established within Algerian universities by Executive Decree No. 20-254 issued in September 2020, which established the National Committee for awarding the "Startup" and "Innovative Project" labels, defining its tasks, composition, and operating mechanisms.

As a significant step within the state's strategy to educate students in entrepreneurship and instill a spirit of innovation and entrepreneurial orientation to establish their own projects, this move aims to reduce reliance on the job market and the public sector. The University business incubators in Bordj Bou Arreridj, like others across Algeria, were established to achieve these objectives, especially as outlined in Decision 1275.

Hence, the importance of this research paper emerges as it seeks to further understand the role of business incubators and their effectiveness in achieving the objectives for which they were established. Therefore, we attempt to address the following problem:

**What are the results achieved by the business incubators in Bordj Bou Arreridj university since their establishment, within the framework of Decision 1275 (Startup Certificate/Patent Certificate)?**

To answer the above problem, the research paper is divided into the following main axes, which attempt to encompass various aspects of the topic:

**First Axis:** General concepts about business incubators

**Second Axis:** Concepts about university business incubators

**Third Axis:** Evaluative presentation of the activity of the business incubators at the University of Bordj Bou Arreridj during 2022-2024

**Study Objectives:**

- Understand the role of university business incubators and their approach to supporting idea and project owners.
- Understand Ministerial Decision 1275 (Startup Certificate/Patent Certificate).
- Highlight the most significant contributions and activities of the business incubator at the University of Bordj Bou Arreridj during the years 2022-2024.

**2. General Concepts about Business Incubators:**

Through this section, we aim to provide some insight into the concept of business incubators, including their definition, origin, objectives, and the services they provide.

**2.1. Origin of Business Incubators:**

The concept of business incubators originated in the United States of America, in New York City in 1959. It emerged when a family transformed the headquarters of their inactive institution into a business center, leasing its units to individuals interested in starting a business while providing them with advice and consultations. This idea proved highly successful, evolving into what is now known as an incubator. Thousands of small and medium-sized enterprises have emerged from these incubators. However, the concept of business incubators was not systematically pursued until 1984, when the Small Business Administration (SBA) collaborated with some American entrepreneurs to establish and develop innovative small businesses (Zaydi & Miftah, 2011, p. 236).

The period following the emergence of these incubators witnessed successive developments. In the 1980s and early 1990s, incubators became a suitable community tool for achieving economic development by helping small enterprises grow and sustain, serving as a fundamental and important factor for economic growth in the regions where they were established.

The number of incubators worldwide increased to over 3500, with more than 900 incubators in the United States alone in 2000, and over 2500 incubators outside the United States, including 1000 in the European Union. In developing countries, the number of business incubators was estimated to be around 500 in 1997, including 300 in Korea. In 2002, there were 465 incubators in China, while Brazil counted 150 incubators in 2001 (Scaramuzzi, 2002, p. 6).

**2.2. Definition of Business Incubators:**

The term "business incubators" has sparked debate among those interested in economic development issues, whether individuals or institutions, as incubation initiatives are considered tools of economic development policy. In 1991, the Economic and Social Commission for Western Asia (ESCWA), in collaboration with the United Nations Development Programme (UNDP) and several regional and local institutions, sought to promote the concept of incubators and clarify their role as successful mechanisms with specific objectives and very simple requirements. They defined business incubators as: "An established institution with a legal entity directly related to entrepreneurs who wish to establish institutions aiming to provide a comprehensive package of services, facilities, consultations, and supportive mechanisms to overcome all the difficulties associated with the startup phase" (Jawad & Al-Batat, 2015, pp. 80-81).

The ESCWA organization also defines them as: "A comprehensive package of services, facilities, supportive mechanisms, and consultancy. Thus, it is an established institution with a legal entity, experience, and relationships for those who want to establish their small enterprises, aiming to reduce the costs of the startup phase for these institutions" (Qutaf, 2006-2007, p. 117).

The National Business Incubation Association defines them as: "Entities aimed at helping innovative start-ups and new entrepreneurs, providing them with the means, expertise, and financial support to overcome the burdens and stages of launching and establishing their enterprises. They also undertake marketing and dissemination activities for the products of these enterprises" (Ammara & Park, 2019, p. 114), which is the most comprehensive definition from the researchers' perspective.

### **2.3. Objectives of Business Incubators:**

Generally, the main objectives for which business incubators were established include the following :

- Stimulating underdeveloped regions and providing job opportunities.
- Empowering innovators and inventors to realize their ideas, providing administrative and technical training, and assisting entrepreneurs in starting and developing their projects (Sabrine & Mustafawi, 2022, p. 235).
- Providing a suitable business environment for the growth of new businesses in their early stages and promoting initiative and assisting small projects in overcoming obstacles they may face.
- Reducing rental costs for entrepreneurs and new initiators.
- Providing strong projects for the community in the future, able to continue and develop.
- Providing the appropriate support facilities for the ambitious category through a network of specialists, consultants, and guides in all administrative, technical, and informational fields.
- Assisting in the transfer and development of technology and expanding the scope of the small and medium-sized enterprises sector (Al-Zaidani, 2009, p. 20).

### **3. Generalities about Algerian business incubators:**

University business incubators are considered one of the most important types of business incubators because they focus on an important segment, namely university students and specialized researchers. Through this axis, we attempt to refine the definition of this type of incubator and highlight its importance and the services it provides.

#### **3.1. Definition of university business incubators:**

The idea of turning towards university incubators began as a transformative point to build a bridge that translates the academic role into practical activities. This is because students' orientation toward their future careers is influenced and interacted with by the surrounding environmental conditions. (Fayolle & Degeorge, 2006)

University business incubators are defined as an integrated system of facilities, mechanisms, programs, activities, services, and consultations provided by universities for the benefit of individuals, institutions, project owners, and students to practice their creativity, develop their innovations, establish their small and medium-sized projects, and learn how to manage and develop them. (Almasjadi et al., 2020, p. 136) They represent places provided by the university for students, professors, and community institutions to practice their creativity, work on their innovations, and establish their small projects.

They are also defined as independent units or centers established under the auspices of universities, providing support and guidance services to researchers in scientific research, helping to develop new technology-based research, and working on linking scientific research with the community and marketing scientific research. (Mahmoud & El Jalab, 2021, p. 58)

Furthermore, It is defined as comprehensive service institutions affiliated with universities, offering programs, activities, and services to graduate students towards entrepreneurship and innovation, establishing their small and medium-sized projects, and how to manage, develop, and grow them to enable them to survive, sustain, and grow, and help them to develop their ideas and transform them into leading projects, to ensure greater chances of success. (Belama & Krush, 2020, p. 205)

Based on the above, the researchers see that the following definition is the closest to their perspectives. University business incubators are defined as independent university units with a special legal entity, representing an integrated environment or framework of place, facilities, services, support mechanisms, consultancy, and organization dedicated to helping entrepreneurs-students in managing and developing new facilities, encouraging creative ideas, and transforming them into products and industries capable of marketing and competition at the national, regional, and international level. (Ibrahim, 2018, p3)

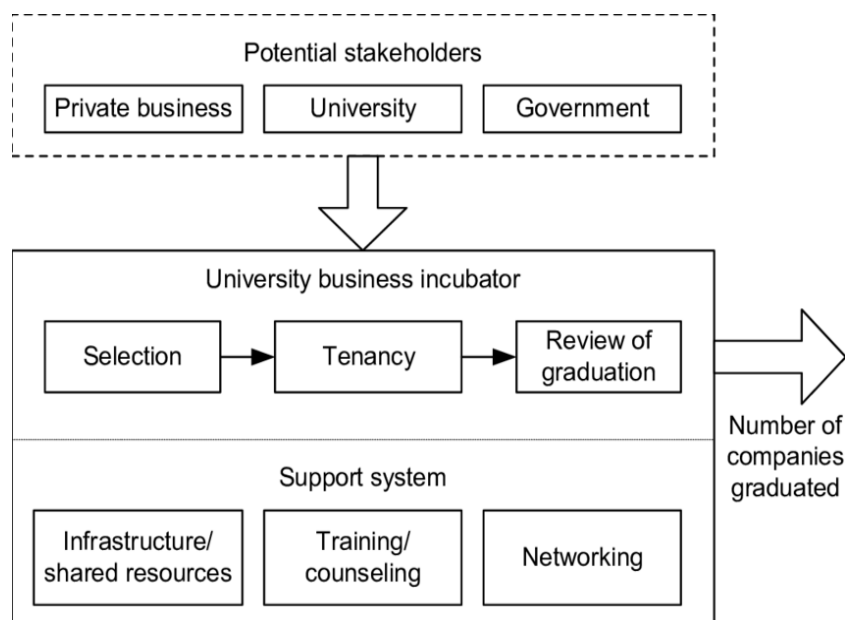
#### **3.2. The importance of university business incubators:**

The importance of university business incubators lies in their distinctive characteristics, which can be summarized as follows (Al-Masajid, 2020, p. 138):

- University business incubators represent a marketing initiative aimed at facilitating knowledge transfer from the university to business incubators and supporting new projects.

- University support for companies and projects reduces the likelihood of new project failure.
- Incubators serve as the institutional infrastructure of universities to activate technology transfer.
- Additionally, incubators have the ability to make new generations with patents at the national level.
- Business incubators play a role in strengthening cooperation between the public and private sectors and universities in comprehensive economic and social development.
- University business incubators support the establishment and development of projects based on advanced technology and expertise within universities.

**Figure 1: Model of a university business incubator**



**Source:** Dimitar Nikoloski and other, 2013, P4

The importance of university business incubators lies in their becoming the driving force for national and global economic development. They play a significant role in various economic and social development paths and serve as the nucleus for translating scientific achievements and human creativity into productive projects.

### 3.3. Services provided by University Business Incubators:

The significance of university business incubators is derived from the quality and diversity of the services they provide. These services include:

- **Legal services:** Small and medium-sized enterprises affiliated with incubators require legal services related to various matters such as establishment, registration, intellectual property protection, and patents.
- **Access to university technology:** Assistance in obtaining necessary funding for projects through arrangements in which universities participate in project ownership, in exchange for intellectual property rights and the utilization of university patents.
- **Provision of suitable spaces and basic facilities:** Including laboratories, equipment, additional needs such as devices, software, IT services, furnished offices, and basic communication requirements.
- **Technical support for affiliates:** Programs for cooperation and coordination between technology agencies and incubators, utilizing distinguished experts and specialists, and benefiting from academics and researchers at universities. (Mazi, 2002, p. 19)
- **Consultancy services:** These services include conducting economic feasibility studies, legal and marketing consultations, comprehensive quality consultations, technical and administrative business management, and financial and intellectual property protection consultations.

- **Human Resource Development Services:** In terms of preparing the workforce for contracting projects, these services include linking workers with incubators and labor markets, developing the skills of these individuals, and connecting them with various development entities.
- **Financial services:** by intermediation and guidance for financial institutions, government programs, financial support institutions.
- **Administrative services:** Among the tasks performed by university incubators is training administrative personnel on accomplishing administrative tasks and the necessary computer services. (Ben Atiya & Miyaah, 2022, p. 64).
- **General services:** These include providing offices and storage spaces, a public relations mechanism, participation in international conferences and exhibitions, maintenance services, as well as assistance in obtaining appropriate financing through coordination with relevant parties interested in such projects.
- **Infrastructure:** Incubators provide a typical building suitable for establishing and founding businesses, along with furnished spaces to host affiliated institutions. Additionally, they offer laboratories, communication facilities, and laboratory amenities.
- **Networking:** Incubators link new projects with business incubation processes and establish relationships with capital, strategic partners, and production organizations located in the incubator's vicinity. They leverage these relationships to benefit the incubated projects, thus providing a broad base for knowledge exchange between the incubating and incubated entities. (Abdel Monem & Salem, 2022, pp. 406-407)

It is evident from the above that the services provided by university business incubators are diverse and integrated, facilitating the entry and competition of emerging institutions in the job market. This is a result of the assistance and facilitation provided by incubators to students.

#### 4. Evaluation the Activities of the business incubators of Bordj Bou Arréridj University (2022-2024)

##### 4.1. Introduction to the business incubators of Bordj Bou Arréridj University:

Based on the correspondence of Mr. Secretary-General of the Ministry of Higher Education and Scientific Research No. 1737/A/2022 dated November 16, 2022, requesting a study on the establishment of a university business incubator at the level of university institutions, and in accordance with Executive Decree No. 20-254 issued in September 2020, which establishes the National Committee for granting the "Startup" certificate, "Innovative Project" and "Business Incubator" and defines its tasks, composition, and operation.

The business incubators of Bordj Bou Arréridj University was established by virtue of Internal Decision No. 258 issued on November 22, 2022, in accordance with Ministerial Decision No. 1275 (Startup Certificate/Patent Certificate) dated September 27, 2022, (Decision No. 258, 2022), and is located at the Faculty of Arts and Foreign Languages on the third floor.

Business Incubator of University of Bordj Bou Arréridj is a department under the supervision of the university, affiliated with the Ministry of Higher Education, under the auspices of the General Directorate of Scientific Research and Technological Development. It is dedicated to mentoring and supporting university students with the aim of transforming them into highly qualified scientific and professional entrepreneurs.

Figure 2: University of Bordj Bou Arreridj Business Incubators Logo



Source: From the files submitted by the business incubators of Bordj Bou Arréridj

The University Business Incubator aims to attract, support, and guide creative and innovative individuals to transform their ideas and innovations into productive economic projects. It also aims to establish emerging institutions (START-UP) that achieve financial profits contributing to economic wealth creation and export diversification.

**In terms of structure:**

- The incubator is managed by a designated director appointed by the University Director from among the professors who hold relevant certificates related to the incubator and have the desire and readiness for management and mentoring.
- The team consists of six professors, administrative staff, and workers, including IT engineers and a secretary.

The Business Incubator is under the presidency of the university (Deputy Director of the University for Higher Education and Postgraduate Training) and is overseen by the head of the task force responsible for following up on Ministerial Decree 1275 coordinates and works with the director of the business incubator to implement the program and action plan prepared annually at the beginning of the academic year.

**4.2. Tasks of the business incubators of Bordj Bou Arreridj University:**

The tasks and powers of the university business incubator are determined by Executive Decree No. 20-254 issued in September 2020, which establishes the National Committee for granting the "Startup" certificate, "Innovative Project," and "Business Incubator" and defines its tasks, composition, and operation. (Executive Decree 20-254, 2020):

- Attracting and selecting innovative and creative individuals.
- Increasing the chances of survival for start-up companies and supporting the entrepreneurship.
- Training, applying the Business Model Canvas (BMC), and providing guidance for innovative and creative individuals.
- Providing facilities for mentoring, supervision, and training.
- Offering legal and judicial consultation services.
- Providing scientific and technical expertise and developing the creative and innovative aspects of initial projects.
- Providing agreements and making them available to project owners.

Additionally, the University of Bordj Bou Arreridj's business incubators provide services such as:

- Supporting entrepreneurial students and researchers.
- Supporting innovation and creativity by offering guidance, expertise, and facilities.
- Conducting economic feasibility studies, technical, and managerial investments to create economically and technologically viable projects.

Moreover, they aim to instill the spirit of entrepreneurship among university students through seminars that enable students to interact directly with the world of investment, investors, and economic operators. This facilitates learning from experiences and discussing various challenges and obstacles that stand in the way of realizing their future projects realistically. This is in line with the goal of making today's students the entrepreneurs of tomorrow and strengthening the integrated relationship between the economic, social, and academic sectors, to make the university a catalyst for wealth creation and workforce development, in implementation of Decree No. 12-75 issued by the presidency.

**4.3. Achievements of the business incubators of Bordj Bou Arreridj University (2022-2024):**

The incubator has carried out many activities since its inception. We will arrange them chronologically within the following stages:

**4.3.1. Sensitization Stage:**

During this stage, the incubator team organized several awareness campaigns about Decree 1275 at various faculties of the university. Two sessions were also held in collaboration with Bordj Bou Arreridj Radio to explain the working mechanisms and the benefits of the incubator's services, in the academic year 2022-2023, while the beginning of the first semester of 2024, the incubator team intensified its awareness campaigns for students registered with the incubator, holding regular meetings at all university faculties.

**4.3.2. Project Registration and Evaluation:**

After the awareness phase, the incubator opened registration for enrollment. We witnessed the registration of more than 210 projects distributed across all faculties of the university at the beginning of the academic year 2022-2023."

**Table 1: Number of Registered Projects at Bordj Bou Arreridj University 2022-2023**

Faculty	Number of Projects
Faculty of Science and Technology	113
Faculty of Economics, Business, and Management Sciences	47
Faculty of Natural and Life Sciences	26
Faculty of Social and Human Sciences	09
Faculty of Mathematics and Computer Science	07
Faculty of Law and Political Science	04
Faculty of Arts and Languages	04
<b>Total</b>	<b>210</b>

**Source:** (From the documents submitted by Bordj Bou Arreridj Business Incubators)

Subsequently, these projects underwent evaluation in ten (10) evaluation sessions, divided according to the students' project specialties. Under the supervision of numerous specialized professors from all faculties, 124 projects were accepted (81 projects were included under Decision 1275).

In contrast, the current year 2024 witnessed a significant increase in student registration with the incubator, the majority of them from the Faculty of Science and Technology, similar to the previous year. This is due to the importance of the specialization in supporting innovative aspects, as shown in the following table:

**Table 2: Number of Registered Projects at Bordj Bou Arreridj University 2023-2024**

Faculty	Number of Projects
Faculty of Science and Technology	39
Faculty of Economics, Business, and Management Sciences	11
Faculty of Natural and Life Sciences	19
Faculty of Social and Human Sciences	07
Faculty of Mathematics and Computer Science	10
Faculty of Law and Political Science	02
Faculty of Arts and Languages	00
<b>Total</b>	<b>88</b>

**Source:** (From the documents submitted by Bordj Bou Arreridj Business Incubators)

From the above table, we notice a significant decrease in the number of students registered in the incubator. In our opinion, this is due to several reasons:

- In the academic year 2022-2023, Decision 1275 was issued, which was a new law for students, sparking their enthusiasm to seize opportunities and participate under the decision, benefiting from its advantages.
- Many students withdrew their registration with the incubator last year and converted their projects into traditional dissertations, fearing the new, and preferring routine and traditional methods as their goal was solely focused on obtaining a graduation certificate.
- Lack of entrepreneurial orientation among students, especially since the experience of the startup is new at the national level. Most students are afraid of taking risks, especially when they are at the end of their academic path.
- Lack of training for students in entrepreneurship, as they do not show interest in the entrepreneurship and business management scale, considering it merely exploratory.

#### 4.3.3. Training Courses:

The business incubators provided workshops to train and educate students affiliated with them, considering that entrepreneurship requires new skills and knowledge to deal with the market, economic problems, crystallize and develop ideas to make them innovative, and more. The most important courses held were:

- Organizing training courses for students with projects on the Business Model Canvas (BMC), where students were divided into 05 groups to benefit more from the training.
- Holding courses in Design Thinking (Proposed Value Model).
- Organizing workshops on how to register for a patent.
- Organizing workshops on how to register for a "Startup" label.
- Holding a training day on preparing: Technical cards for projects, preparing the initial model (for: industrial project/digital project).
- Organizing training workshops on preparing: graduation dissertations and technical project cards, with the participation of students, supervisors, and pedagogical teams from the faculties, to clarify the application methods of Decision 1275.
- Holding evaluation sessions for project owners regarding: Business Model Canvas preparation, project technical card preparation.
- Continuous work and support for students, especially during holidays and the month of Ramadan, where Ramadan evenings were held, including various training sessions for students in Business Model Canvas and creative thinking, among others.
- Also, relying on distance learning via the Google Meet platform, especially during holidays and Ramadan evenings, to stay in touch with students at all times and answer their concerns.

It is worth mentioning that the incubator team created a website for the incubator (<https://incub.univ-bba.dz>), which includes accounts for students affiliated with it. The website is designed in a creative and user-friendly manner, allowing students to log in and benefit from several services, including registering for training courses, monitoring their project's progress, submitting their concerns for quick responses, and other services aimed at facilitating students' work and overcoming any difficulties they may face.

**4.3.4. Discussion and Evaluation:**

The period from June 20 to July 20, 2023, was allocated for the discussion of graduation dissertations for startups under Decision 1257. Additionally, more than 60 project ideas were recorded under this decision. These projects reflect students' interest and highlight their capabilities in innovation.

Regarding the first semester of the year 2024, there was also intense activity in following up on projects after their evaluation and acceptance for registration in the Bordj Bou Arreridj University incubators. Students who needed to adjust their ideas and projects to comply with the content of Decision 1275 were guided. The stage of discussing the projects registered in the year 2023-2024 is awaited, starting from June 2024. The incubator is working to provide all opportunities that can benefit the student in completing their project to see the light.

**Figure 3. The tenants' selection and incubation process at Universities' incubators**



Source: Iveta Čirule, March 29, 2018, P26

University incubators are actually fulfilling the social mission in pre-incubation phase and filling the gap of business incubation needs of young entrepreneurs. This subchapter explains the tenants' selection procedure, services and various support activities provided by University business incubator.

Through the above presentation, it is clear that the business incubators of Bordj Bou Arreridj University, like other national business incubators, serve as companions for students to prepare and execute their graduation projects, assisting them with all available resources, both material and intellectual. We notice that the incubator has prepared its space to be suitable for continuous training for students.

Moreover, the doors of the incubator were open throughout the week to receive students, guide them, listen to their concerns, and ensure the facilitation of obstacles so that they could prepare their projects.

The university administration also entered into several agreements with various economic institutions, exceeding 52 agreements, in coordination with the university's link office and economic institutions "BLUE" within the framework of partnership exchange between the university and its economic environment in Bordj Bou Arreridj. Support entities, business incubators, entrepreneurship development centers, support, and innovation are responsible for finding ways and mechanisms to implement the content of these agreements, benefiting both the student and the university on one hand, and the institution's executives and economic institutions on the other.

## 5. Conclusion:

Through the above presentation, we clearly notice the interaction and positive response of students towards the incubators, as evidenced by the number of innovative projects registered. The number of innovative projects at the level of university business incubators in Algeria reached nearly 9,000 projects. This confirms a significant interest from students with project ideas registered through all university business incubators nationwide.

Bordj Bou Arreridj business Incubators University, like other national incubators, received a great deal of attention despite being newly established. More than 200 projects were registered for students during the year 2023, and it is noteworthy that most of these projects are pioneering and specialized, with the majority being in the Faculty of Science and Technology, relying on innovation and modern technology, they contribute to the development of the national economy and the creation of new job opportunities.

On the other hand, Bordj Bou Arreridj University recorded a qualitative leap in the field of innovation and graduation projects related to startups, exceeding 80 projects in startups for the academic year 2023-2024. These projects are mainly related to startups in agriculture, animal production, and industry, in line with the nature of the industrial zone of Bordj Bou Arreridj.

After reviewing the various activities carried out by the Bordj Bou Arreridj University incubator, we reached the following conclusions:

- University business incubators aim, through their activities, to develop entrepreneurial thinking among university students.
- The results of the Bordj Bou Arreridj University business incubator's work are above average due to the newness of its activities and the novelty of Decision 1275, which was applied in the same year the incubator was established.
- University business incubators raise awareness among students about the importance of entrepreneurship by organizing seminars, meetings, and training courses.
- They conduct training courses supervised by highly competent professors in the field to increase the students' knowledge base.
- Students affiliated with the Bordj Bou Arreridj University business incubator possess a set of personal and educational qualities that motivate them to establish their own institutions, especially what the specificity of the region dictates, as it includes a diverse industrial pole of economic institutions.

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